DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022916 Address: 333 Burma Road **Date Inspected:** 17-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

CWI Name: Tian Lei, Liu Fa Wen, Chen Shig GWI Present: Yes No Yes N/A Yes No **Inspected CWI report:** No **Rod Oven in Use:**

N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

SMAW welding of fillet welds located on Bike Path Handrail component identified as BKR-NS-3 for miscellaneous 4mm welds attaching P-45 to P-171 and P-171 to P-40 parts. Welder is identified as welder no. 062810. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2112.

This inspector observed ZPMC personnel welding of components identified as Lift 13 & 14 lifting frame beam.

Bay Number 4

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 3025TR1-001 for weld(s) 001~016. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-10291.

N/A

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FCAW welding of complete joint penetration welds located on Traveler Rail component identified as 3026TR1-001 as identified on weld repair data sheet B-WR-20741 for repaired complete joint penetration welds identified as weld no.(s): 019. Welder is identified as welder no. 066763. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-FCAW-1G(1F)-repair-ESAB.

Bay Number7

FCAW welding of fillet welds located on Cantilever Box Bracket Assembly component identified as BK3003-001 weld no.(s) 001~004. Welder is identified as welder no. 046706. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

Bay Number 8

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. All components were as listed on NWIT notification no. 08852. The member(s) is/are identified as OBG Bike Path nad Traveler Rail components as identified below with the following identifying weld no.(s):

- 1. 26BK1-001, 001, 002, 011, 012.
- 2. 30BK1-001-001~010.
- 3. 29BK3-001-025~036.
- 4. TB3001-009-001.
- 5. TB3001-010-001.
- 6. TB3001-011-001.
- 7. TB3001-012-001.
- 8. BK4ASD1-062-001~004 022~024, 027.

Bay Number 9

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 3016TR2-001 for weld(s) 003 & 004. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Chen Shigang was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-10263.

FCAW welding of complete joint penetration welds located on Traveler Rail sub assembly component identified as X4075B weld no.(s) 001 & 002. Welder is identified as welder no. 059378. The welding variables recorded by ZPMC QC identified as Chen Shigang appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

FCAW welding of complete joint penetration welds located on Traveler Rail sub assembly component identified as X4075C weld no.(s) 001 & 002. Welder is identified as welder no. 059443. The welding variables recorded by ZPMC QC identified as Chen Shigang appeared to comply with applicable WPS(s) WPS-B-T-2231-ESAB.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the

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applicable contract documents

Summary of Conversations:

Pertinent conversations are included in the body of the report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer